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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/734,403	03/08/2001	Bruce Benfield	STL9-2000-0072US1/1858P	5418

7590 01/25/2006

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EXAMINER
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MOORTHY, ARAVIND K

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/734,403	<b>Applicant(s)</b> BENFIELD ET AL.	
	<b>Examiner</b> Aravind K. Moorthy	<b>Art Unit</b> 2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This is in response to the amendment filed on 7 November 2005.
2. Claims 1-28 are pending in the application.
3. Claims 1-28 have been rejected.

### *Response to Arguments*

4. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1-5, 8-12, 15-18, 21-23 and 25-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Steinmetz et al U.S. Patent No. 6,421,703 B1.**

As to claim 1, Steinmetz et al discloses a method for integrating encryption functionality into a database system, the method comprising:

- (a) providing data encryption in a database system [column 9 line 7 to column 10 line 46]; and
- (b) utilizing the function within structured query language statements [column 9 line 7 to column 10 line 46].

As to claims 2, 9 and 16, Steinmetz et al discloses that step (a) further comprises (a1) adding at least two functions as user defined functions in the database system [column 9 line 7 to column 10 line 46].

As to claims 3, 10 and 17, Steinmetz et al discloses that the user-defined functions further comprise a first function to encrypt user-specified data when inserted or updated in the database system [column 9 line 7 to column 10 line 46].

As to claims 4 and 11, Steinmetz et al discloses that the user-defined functions further comprise a second function to decrypt the user-specified data when selected from the database system [column 9 line 7 to column 10 line 46].

As to claims 5, 12 and 18, Steinmetz et al discloses that the first function further encrypts the user-specified data with a user-specified password [column 10 line 47 to column 12 line 49].

As to claim 8, Steinmetz et al discloses a system for integrating encryption functionality into a database system, the system comprising:

at least one computer processing device [column 6, lines 34-39]; and

a database management system installed on the at least one computer processing device, the database management system supporting utilization of at least two functions for data encryption [column 9 line 7 to column 10 line 46],

wherein the at east two functions for data encryption are invoked within structure query language statements [column 9 line 7 to column 10 line 46].

As to claim 15, Steinmetz et al discloses a computer readable medium containing program instructions for integrating encryption functionality into a database system, the program instructions comprising:

(a) providing data encryption in a database system [column 9 line 7 to column 10 line 46]; and

(b) utilizing the function within structured query language statements [column 9 line 7 to column 10 line 46].

As to claim 21, Steinmetz et al discloses a method for integrating encryption functionality into a database system, the method comprising:

defining a function to support encryption of data in a database system, the encryption of data being based on a user-specified password, the function having a function name [column 10 line 47 to column 12 line 49]; and

utilizing the function within a structured query language statement to control access to the data in the database system including encrypting the data within the database system with the user-specified password [column 10 line 47 to column 12 line 49],

wherein the structured query language statement includes the function name and the user-specified password [column 10 line 47 to column 12 line 49].

As to claims 22 and 26, Steinmetz et al discloses that the function is a user-defined function or a built-in function within the database system [column 9 line 7 to column 10 line 46].

As to claims 23 and 27, Steinmetz et al discloses defining a function to support encryption comprises:

defining an encrypt function to encrypt data when inserted or updated in the database system [column 9 line 7 to column 10 line 46]; and

defining a decrypt function to decrypt data when selected from the database system [column 9 line 7 to column 10 line 46].

As to claim 25, Steinmetz et al discloses a computer readable medium containing program instructions for integrating encryption functionality into a database system, the program instructions comprising:

defining a function to support encryption of data in a database system, the encryption of data being based on a user-specified password, the function having a function name [column 10 line 47 to column 12 line 49]; and

utilizing the function within a structured query language statement to control access to the data in the database system including encrypting the data within the database system with the user-specified password [column 10 line 47 to column 12 line 49],

wherein the structured query language statement includes the function name and the user-specified password [column 10 line 47 to column 12 line 49].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**6. Claims 6, 7, 13, 14, 19, 20, 24 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steinmetz et al U.S. Patent No. 6,421,703 B1 as applied to claims 1, 8, 15, 21 and 25 above, and further in view of Grawrock U.S. Patent No. 6,360,322 B1.**

As to claims 6, 7, 13, 14, 19, 20, 24 and 28, Steinmetz et al does not teach that the first function further encrypts with a password hint. Steinmetz et al does not teach that the user-defined functions further comprise a third function to get the password hint.

Grawrock teaches a first function that encrypts the user-specified data with a user-specified password [column 4, lines 25-57]. Grawrock teaches a function that encrypts with a password hint. Grawrock teaches another function to get the password hint [column 8, lines 21-51].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Steinmetz et al so that user-specified data would have been encrypted with a user-specified password. One of the functions would have been a password hint. There would have been a separate function to get the password hint.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Steinmetz et al by the teaching of Grawrock because it

Art Unit: 2131

allows only bona fide users to retrieve passwords. It also adds extra security because only the user is going to know the answer to the hint questions [column 1 line 59 to column 2 line 15].

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aravind K. Moorthy whose telephone number is 571-272-3793. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2131

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aravind K Moorthy  
January 18, 2006



AYAZ SHEIKH  
SUPERVISORY PATENT EXAMINER  
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